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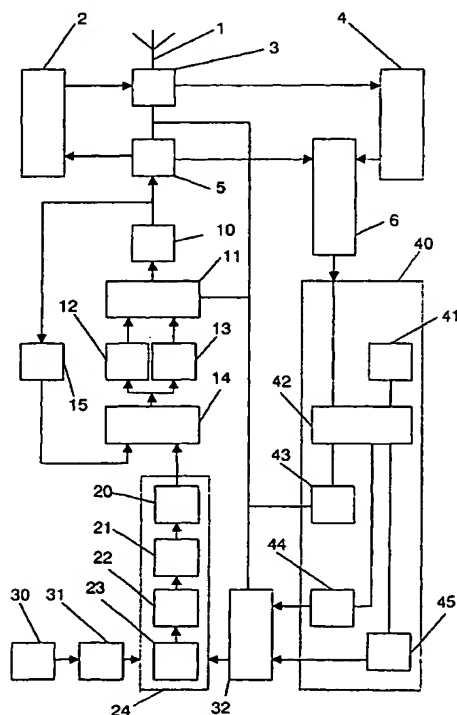
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[Continued on next page]

(54) Title: TRANSCEIVER WITH MULTI-STATE DIRECT DIGITAL SYNTHESIZER DRIVEN PHASE LOCKED LOOP



(57) Abstract: Transceivers for use in time division telecommunication units like mobile phones and base stations can be produced at lower costs by, in a transmitting mode, switching the direct digital synthesizer (DDS 24) driven phase locked loop (PLL 10-15) into a modulating state and supplying a modulation signal to the DDS and switching in the PLL a first filter (12) allowing the generation of an improved modulated signal, and by, in a receiving mode, switching the DDS driven PLL into an oscillating state and supplying a non-modulation signal to the DDS and switching in the PLL a second filter (13) allowing demodulation with reduced phase noise. A transmitter part (2) and a non-transmitter part (4,6) share a single DDS driven PLL, based upon the basic idea of using important parts in low cost transceivers for both modes, instead of using different parts for different modes, and achieve a good performance.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 5 423 076 A (MROCH ALAN B ET AL) 6 June 1995 (1995-06-06) column 4, line 12 - line 15 column 5, line 5 - column 6, line 6 column 6, line 36 - line 50 column 9, line 6 - line 34 column 9, line 53 - line 58 column 10, line 4 - column 11, line 2 figures 1,3 --- X DE 197 55 102 A (ELDAT GES FUER ELEKTRONIK UND) 18 June 1998 (1998-06-18) column 3, line 7 - line 13 figures 1,2 --- -/--	1-3,6-14 4 1,2,6, 8-14
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
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